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January 15, 2013  
TRC Solutions Project No. 192355

Mr. Gary Moore  
U.S. EPA Region 6  
1445 Ross Avenue, Suite 1200  
Dallas, TX 75202-2733

**Re: Weekly Progress Report  
Falcon Refinery Superfund Site  
Ingleside, San Patricio County, Texas  
TXD 086 278 058**

Dear Mr. Moore:

On behalf of Lazarus Texas Refinery I, LLC, (Lazarus), TRC Solutions (TRC) submits this Weekly Progress Report on the Removal Action Activities at the Falcon Refinery Federal Superfund Site to the United States Environmental Protection Agency for your review.

If you have any questions, comments, or concerns, please do not hesitate to contact me at (361) 522-1935.

Sincerely,  
TRC

Alonzo G. Arredondo  
Senior Geologist

Attachment: Weekly Progress Report  
cc: Lazarus Texas Refinery I, LLC

## WEEKLY PROGRESS REPORT - Falcon Refinery Federal Superfund Site, Ingleside, TX;

### 1. TASKS NECESSARY TO COMPLETE THE REMOVAL ACTION

| <u>TASK</u>  | <u>START</u> | <u>EST. COMP DATE</u>      |
|--|--------------|----------------------------|
| Butane Tank<br>This tank contains less than one gallon of sludge.<br>The tank will be cleaned. The sludge will be disposed of appropriately and the tank will be inspected.  | 1/18/12      | <del>8/24/12</del> 9/28/12 |
| Tank 12<br>The damaged roof will be removed, Oil/sludge will be removed and disposed. The tank will be cleaned and repaired for temporary use to treat water from frac tanks, Tank 30 and Tank 26.   | 2/30/13      | Completed 5/30/13          |
| The floor in this tank will be repaired to meet API 653 code specifications.   | 3/15/13      | <del>9/30/12</del> 3/28/13 |
| The roof in this tank will be repaired to meet API 553 code specifications.  | 4/1/13       | <del>9/30/12</del> 4/27/13 |
| Remove contaminated soils from the soils underneath the tank should inspection reveal any deterioration or failure of the tank bottom allowing any materials to leak to those soils.   | 2/15/13      | <del>9/30/12</del> 3/15/13 |
| Tank 7<br>The damaged roof will be removed. Oil/sludge will be removed and disposed. The tank will be cleaned and inspected (API 653).   | 2/11/13      | <del>7/15/12</del> 3/8/13  |
| Remove contaminated soils from the soils underneath the tank should inspection reveal any deterioration or failure of the tank bottom allowing any materials to leak to those soils.   | 3/8/13       | <del>8/24/12</del> 3/29/13 |
| Tank 30<br>The damaged roof in this tank will be removed, oil/sludge will be removed and disposed of so the tank can be repaired to store treated water from Tank 16.  | 5/14/12      | <del>6/23/12</del> 3/15/13 |
| The floor in this tank will be repaired to meet API 653 code specifications.   | 4/22/13      | <del>9/30/12</del> 5/20/13 |
| Remove contaminated soils from the soils underneath the tank should inspection reveal any deterioration or failure of the tank bottom allowing any materials to leak to those soils.   | 3/22/13      | <del>9/24/12</del> 4/12/13 |
| Tank 26<br>Because of the poor integrity of this tank, all liquids in Tank 26 will be transferred to Tank 12 for treatment of water with a water treatment system and land applied in accordance with land disposal wastewater treatment criteria and additional criteria established by the TCEQ. | 7/15/12      | <del>9/30/12</del> 2/22/13 |
| Removal and disposal of tank sludge.   | 2/22/13      | <del>9/14/12</del> 3/22/13 |

|  |         |                            |
|--|---------|----------------------------|
| Cleaning and replacement of tank floor.  | 4/3/13  | <del>9/24/12</del> 4/26/13 |
| Remove contaminated soils from the soils underneath the tank should inspection reveal any deterioration or failure of the tank bottom allowing any materials to leak to those soils. | 3/29/13 | <del>3/29/13</del> 5/10/13 |

#### Water Treatment System

|  |         |         |
|--|---------|---------|
| A water treatment system capable of treating contaminated water to meet the land disposal restrictions and the criteria set up by TCEQ will be constructed with the appropriate irrigation field as approved by TCEQ. According to TCEQ, irrigation is only allowed from April 1 – August 30 (the growing season). | 4/16/12 | 1/25/13 |
|--|---------|---------|

## 2. PROJECT ACTIVITIES COMPLETED THIS REPORTING PERIOD (JANUARY 7 - 11, 2013)

- Lazarus held planning meetings with workers for January 2013. Workers also gathered equipment (pumps, hoses, diesel fuel, and generators).
- Lazarus setup hoses to begin transporting water from Tank 26.
- Lazarus received and reviewed pricing agreements from U.S. Ecology for the disposal of K169 hazardous waste that is currently contained in four boxes at the site.

## 3. ACTIVITIES PLANNED FOR WEEK FOLLOWING (JANUARY 14 - 18, 2013)

- The water samples collected from Tank 12 will be evaluated and modeled for treatment with carbon.
- Transfer water from Tank 26 into Tank 12.
- Evaluate the structural integrity / repair Tank 16.
- Lazarus will transport and dispose of waste in roll-off boxes that contain K169 hazardous waste (tank bottoms from Tank 12) currently at the site. The waste will be disposed of as approval is received from U.S. Ecology in Robstown, TX. Currently there are four boxes that contain tank bottoms from Tank 12 at the site.
- Continue general housekeeping activities at the site.

## 4. ACTIVITIES PLANNED FOR WEEK FOLLOWING (JANUARY 21 - 25, 2013)

- Resume transferring water from Tank 26 into Tank 12.
- Lazarus will transport and dispose of waste in roll-off boxes that contain K169 hazardous waste (tank bottoms from Tank 12) currently at the site. The waste will be disposed of as approval is received from U.S. Ecology in Robstown, TX. Currently there are four boxes that contain tank bottoms from Tank 12 at the site.
- Continue general housekeeping activities at the site.

## **5. ACTIVITIES PLANNED FOR WEEK FOLLOWING (JANUARY 28 – FEBRUARY 1, 2013)**

- Resume transferring water from Tank 26 into Tank 12.
- Continue general housekeeping activities at the site.

## **6. ISSUES ENCOUNTERED**

- Oil in Tank 26 is excessive and suspended. The water in Tank 26 is requiring additional filtration.
- On September 4, 2012 TRC observed a group of contractors working for Superior Crude Gathering in the process of hydro-cutting a door into Tank 16 to facilitate the cleaning of the tank. On September 13, 2012 a group of contractors were removing tank sludge from Tank 16 using a super sucker truck. The rate of removal according to a site worker is approximately 25 cu yd./hour. The amount of sludge observed in the tank is from 10" to 1.5 ft. On September 25, 2012 contractors working for Superior Crude were observed removing tank bottoms from Tank 16. As of October 4, 2012, TRC discussed the status of the tank cleaning with Superior's contractor. There is approximately a 3 foot heel of sludge that remains about 12 feet from the back wall (east side) of this tank. On October 17, 2012 the floor and remaining tank bottom sludge was photographed. On October 26, 2012 Tank 16 was photographed to document the progress on power washing the tank. During the week of Oct. 29 – Nov. 2, 2012 the contractor removed the tank bottom sludge and power washed the tank. The contractor has stated that the Tank washing will be completed on Monday, Nov. 5, 2012. Photographs were taken that show the progress of the Tank cleaning. The power washing of Tank 16 was completed during the week of Nov. 5 - 9, 2012.

- **STATUS OF TANK 16**

At the completion of the power washing of Tank 16 by Superior Crude's contractor, Lazarus began sandblasting the floor to help evaluate the structural integrity of the floor. In the week of November 26 – 30, 2012 Lazarus worked to identify corrosion and holes in the floor of the Tank. Lazarus has patched small holes with fiberglass material and will also procure a contractor to evaluate the structural integrity of the floor in Tank 16 using Method API 653. At the completion of the inspection, the Tank Inspector will provide Lazarus with recommendations for the repair/modification to the floor that will allow Tank 16 to be placed into service.

Upon completion of the recommended repairs to the floor, Lazarus will use Tank 16 to store treated water that is currently being held in Tank 12. Lazarus will hold the treated water in Tank 16 until the floor of Tank 30 has been cleaned, inspected and repaired. Then water will be transferred from Tank 16 into Tank 30 for storage until it can be land applied for the propagation of native grasses.

A spill occurred on June 28, 2012 when a driver operating a Superior Crude Gathering truck caused a rupture at the end of a pipeline. The line released crude petroleum product on the ground surface. The spill was photographed by TRC and was mitigated by Superior's site workers on June 28-29, 2012. Lazarus was notified approximately 15 minutes after the incident. Lazarus subsequently

contacted the Texas Spill Center to notify the state agency of the release at the site. Mr. David Smith of the Corpus Christi District office of the Texas Railroad Commission arrived at the site on June 29, 2012. Mr. Smith documented the spill and provided a directive to Superior Crude Gathering Co to remediate the release. On June 29, 2012 Superior removed the free liquids from the surface and had stockpiled some of the affected soils into an area that was lined with plastic and surrounded with berms. Later that afternoon Superior continued to remove affected soil from a ditch located west of the Tank 15 berm. On July 13, 2012 the site was inspected and photographed. The excavated material was moved to an area east of the green tanks used by Superior Crude Gathering Co. The soil is within a plastic lined soil berm. Additional soil was subsequently placed over the spill area.

- Lazarus sampled insulation in several areas north of Process Area #1 of the Falcon Refinery and identified asbestos in one area. Notification was provided to TDSHS on August 6, 2012 that remedial activities will be implemented (no less than 10 working days from initial notification). Access to the affected area has been restricted and the material has been contained. The asbestos containing material will be managed by a licensed asbestos abatement contractor and sent to a facility that has been approved to accept CERCLA waste.
- The sludge currently in Tank 30 is an asphaltic-based material. An extensive study by Lazarus has proven that the addition of an aromatic and kerosene component will reduce viscosity and enable the pumping/removal of the sludge material from the tank. Lazarus will postpone cleaning/shearing roof from Tank 30 due to the difficulty in removing sludge/residue from the roof material. Oil and water from Tanks 26 and 30 will be mixed in Tank 30 and passed through screens then collected and maintained in 500 bbl. above ground storage tanks. Shearing of the roof in Tank 30 will resume after liquids have been removed from Tank 30.

- **STATUS OF TANK 13**

At approximately 4:30 a.m. on December 26, 2012, an employee of Superior Crude Gathering Corp was making a routine inspection of the Falcon Refinery facility when he observed crude oil leaking from Tank 13. The oil was leaking from the base on the south side of the tank on to the adjacent ground.

A backhoe was brought to the site and a trench was excavated for the purpose of intercepting and capturing the crude oil flowing from the tank. Superior brought a yard truck with pump to Tank 13 and began removing crude from the trench and recirculating it into Tank 13. The pumping of crude to the barge dock from Tank 13 was also initiated and loaded onto a barge. Superior plans to pump crude oil from Tank 13 until it is empty. Three barges were in place at the barge dock as of midday Wednesday (Dec. 26, 2012).

Superior estimates the initial crude volume tank approximately 30+ feet (~ 62,461 bbl.) of oil in Tank 13. A rough estimate of the oil leaking from the southeast base of Tank 13 is approximately 3 to 5 gallons per minute.

On December 27, 2012 Superior continued to pump crude from Tank 13 onto barges located at the barge dock. Crude oil was also pumped from the trench and recirculated into Tank 13 to prevent the continued migration of crude beyond the collection trench. Late in the afternoon Superior estimated 10 feet (~ 20,820 bbl.) of crude oil remained in Tank 13.

On December 28, 2012 Superior continued to pump crude from Tank 13 onto barges located at the barge dock. Crude oil was also pumped from the trench and re-circulated into Tank 13 to prevent the continued migration of crude beyond the collection trench.

On December 31, 2012 Superior continued to pump crude from Tank 13 onto barges located at the barge dock, but pumping was slowing down as the crude oil level in Tank 13 were only about 2 feet. Today the leak from the base of Tank 13 is slowing. This is probably due to the lesser amounts (reducing hydrostatic pressure) of crude in Tank 13. Superior was planning to cease pumping to the barge docks with the large pumps because the large pump began sucking air. The plan was to utilize a yard truck w/pump at Tank 13 to enable pumping to the barge dock without sucking air. Crude oil was also pumped from the collection trench and re-circulated into Tank 13 to prevent the continued migration of crude beyond the collection trench.

On January 2, 2013 Superior continued to re-circulate crude from the collection trench into Tank 13. Superior had a contractor bring two vacuum boxes to prepare for the cleaning of Tank 13. According to the contractor, about 1 foot of crude oil remains in Tank 13. Superior plans to remove the remaining crude oil in Tank 13 and transfer it into Tank 15 with their tanker trucks (with 130 bbl. capacity). This is to allow Superior to pump crude from Tank 15 to the barge dock.

On January 3, 2013 Superior had emptied Tank 13. There are no leaks from the tank. The trench has been emptied and only contains approximately 6 inches of crude in a limited area of the trench. Superior's tank cleaning contractor has additional equipment in the Tank 13 area. It appears this is preparation for cleaning Tank 13. Overall the activities to abate and address the crude oil spill have been responsive to prevent the migration of crude of beyond the tank containment berm.

On January 4, 2013 Superior has contractors removing soil below the tank cleanout door on the south side of the tank. Today there are no leaks from Tank 13. The trench contains approximately 6 inches of crude in a limited area of the trench that was excavated to capture the crude oil. Superior's tank cleaning contractor has additional equipment in the Tank 13 area.

On January 7, 2013 Superior has contractors installing roof cranks to raise the internal floating roof. There are no leaks from the Tank 13. The trench contains approximately 6 inches of water in a limited area of the trench. Superior's tank cleaning contractor has a super sucker and additional equipment in the Tank 13 area.

On January 8, 2013 Superior has contractors cleaning the floor of Tank 13. There are no leaks from the Tank 13. The trench contains approximately 6 inches of water in a limited area of the trench.

Superior's tank cleaning contractor has a super sucker and additional equipment in the Tank 13 area.

On January 9, 2013 Superior has contractors cleaning the floor of Tank 13. Superior's tank cleaning contractor has a super sucker and additional equipment in the Tank 13 area.

On January 10, 2013 Superior has contractors cleaning the floor of Tank 13. There are no leaks from Tank 13. The trench contains approximately 2.5 feet of a water/oil mixture in a limited area of the trench. Superior's tank cleaning contractor has a super sucker and additional equipment in the Tank 13 area. Mr. Danny Deleon, employee with Welfab, Inc. stated Welfab employees conveyed that an area of the Tank 13 floor was not supported by a stable foundation. The employees stated the floor had considerable vertical movement.

## 7. WORKERS ON-SITE THIS PERIOD

| Personnel                             | Period               | Task / Subtask  |
|---------------------------------------|----------------------|---|
| <b>LAZARUS</b>                        |                      |   |
| Everardo Saavedra, Team Leader        | Jan. 8 - 10, 2013    | Setup hoses to transport water from Tank 26.            |
| Jose Luis Galvan, Site Worker         | Jan. 8 - 10, 2013    | Setup hoses to transport water from Tank 26.            |
| <b>TRC Environmental Corporation</b>  |                      |   |
| Alonzo G. Arredondo, Senior Geologist | Jan. 7, 8 & 10, 2013 | Inspection of Site & Superior's Tank 13 leak abatement. |